UNIVERSITI TEKNOLOGI MARA

IMAGE PROCESSING – MORPHOLOGY (DILATION & EROSION)

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DECLARATION

I certify that this thesis and the research to which it refers are the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline

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ABSTRACT

Morphology has being utilized widely nowadays. It is a common method in image processing and it has always been a powerful method in the area of image processing. Morphology can best be defined as the 'form and structure' of an object or the arrangements between the parts of an object. Basically, morphology is related to shape, and digital morphology is a way to describe or analyze the shape of a digital object. The two principal morphology operations are dilation and erosion. Dilation allows objects to expand while erosion shrinks objects by etching away (eroding) their boundaries. These operations can be customized for an application by the proper selection of the structuring element, which determines exactly how the objects will be dilated or eroded. The objective of the project is to reduce noise and thinning or thicken object images. The input images are only concentrated on binary and gray-scale images. The binary images are drawings using Microsoft Paint. Where else the gray-scale images are downloading from the Internet.